Patricia M. French Senior Attorney



300 Friberg Parkway Westborough, Massachusetts 01581 (508) 836-7394 (508) 836-7039 (facsimile) pfrench@nisource.com

July 10, 2005

BY OVERNIGHT DELIVERY AND E-FILE

Mary L. Cottrell, Secretary Department of Telecommunications and Energy One South Station Boston, MA 02110

Re: Bay State Gas Company, D.T.E. 05-27

Dear Ms. Cottrell:

Enclosed for filing, on behalf of Bay State Gas Company ("Bay State"), please find Bay State's responses to the following information requests:

From the Attorney General:

AG-02-60 (Supp.) AG-21-12 AG-21-13 AG-21-16 AG-21-17

AG-22-54

From the Department:

DTE-18-24 DTE-16-22

From MASSPOWER:

MP-1-24

From the UWUA:

UWUA-1-5 UWUA-1-7 UWUA-1-18 UWUA-2-9 UWUA-2-30 (Bulk)

UWUA-2-32 (Bulk) UWUA-3-4 (Bulk)

Please do not hesitate to telephone me with any questions whatsoever.

Very truly yours,

Patricia M. French

cc: Per Ground Rules Memorandum issued June 13, 2005:

Paul E. Osborne, Assistant Director – Rates and Rev. Requirements Div. (1 copy) A. John Sullivan, Rates and Rev. Requirements Div. (4 copies) Andreas Thanos, Assistant Director, Gas Division (1 copy) Alexander Cochis, Assistant Attorney General (4 copies) Service List (1 electronic copy)

RESPONSE OF BAY STATE GAS COMPANY TO THE SECOND SET OF INFORMATION REQUESTS FROM THE ATTORNEY GENERAL D. T. E. 05-27

Date: July 10, 2005

Responsible: Stephen H. Bryant, President Danny G. Cote, General Manager

SUPPLEMENTAL RESPONSE

AG-2-60

Please provide all facts and documentary evidence to support the answer "Yes it has" to the question in the prefiled testimony "Has Bay State been responsible and prudent in its past maintenance and repair procedures for its steel facilities?" Testimony of Stephen H. Bryant, Exh.BSG/SHB-1, p. 37 of 58 lines 20-21, p. 38 of 58 line 1. In addition, list what type of Company property is included in the definition of "steel facilities" as used in the quoted question.

Response:

Bay State is still compiling its response and will supplement when the response is prepared.

SUPPLEMENTAL RESPONSE

Please see the following response to information requests, which demonstrate that the Company has been responsible and prudent in its past maintenance and repair procedures for its steel facilities.

- DTE-3-1 This response demonstrates the Company was compliant with its DOT leak reporting requirements, and explained its leak survey practices, which exceed the state and federal minimum leak survey requirements.
- DTE-3-9 This response identifies all the leak repairs by type and service area that Bay State has done since 1985, and the number of outstanding Class II leaks to be repaired at the end of each calendar year. These attachments illustrate the Company was diligent in managing its leaks.
- DTE-18-20 This response demonstrates that Bay State has been actively addressing its bare steel replacement efforts, and carefully managing this process to minimize costs while ensuring public safety.

- DTE-20-2- This response shows the number of times the Company has replaced steel and cast iron mains since 1993 while municipal improvements were being undertaken. By coordinating Bay State's replacement efforts with municipal improvements, the Company is able to minimize its replacement costs while also minimizing local impacts, such as disruptions to traffic.
- DTE-20-4 This response demonstrates that Bay State is tracking the various types of leaks it incurs, which helps facilitate the prioritization of leak repair and replacement work.
- AG-2-1 This response provides an historical illustration, from 1990 to 2005, of Bay State's aggressive system-wide pipe replacement effort on mains and services, as a result of corrosion and/or general deterioration of pipe.
- AG-2-7 This response describes Bay State's aggressive corrosion monitoring program for all types of pipe material used in the Company's distribution system. Bay State cathodically protects its infrastructure where it is appropriate to do so, and actively tests cathodically protected mains to guard against corrosion. Bay State tracks each and every system leak and compares that information to mileage of pipe by type. This approach is most successful in addressing potential system weakness and exposing system vulnerabilities where they exist.
- AG-2-8 This response identifies the seventeen procedures from Bay State's Operating & Maintenance Procedures (O&M) Manual, that are specific to training field operations leaders and employees relative to Bay State's corrosion monitoring program.
- AG-2-12 This response addresses the question of what was Bay State's replacement program before or during the installation of the bare steel mains and services that are now the subject of the Company's proposed replacement program. Bay State replaces all underground pipes, as needed, pursuant to a five prong approach: 1) performance; 2) capacity (or betterment); 3) opportunistic replacement; 4) code or regulatory compliance and 5) the SIR. At all times, Bay State seeks to balance its system integrity and reliability with best cost operations techniques, and endeavors not to replace any infrastructure before the end of its useful life.

AG-2-16 - This response includes analysis by RJ Rudden Associates of Bay State's Brockton Division's bare and unprotected coated steel main corrosion leak data for the period 1993 through 2003. Rudden reports that "Based on Bay State's Leak Backlog/Repair Ratio comparison to national and regional companies, Bay State has demonstrated excellent leak management."

RESPONSE OF BAY STATE GAS COMPANY TO THE TWENTY FIRST SET OF INFORMATION REQUESTS FROM THE ATTORNEY GENERAL

D. T. E. 05-27

Date: July 10, 2005

Responsible: Stephen H. Bryant, President

AG-21-12 Refer to AG-3-32(b), p. 22. The Company states that it continues to

utilize Metscan devices for all transportation/daily read customers. Provide all Company memoranda that identifies or describes the Company's decision to continue to use Metscan devices for large customers taking daily metered transportation service and/or service

under the Co.'s Extra High Annual C&I rate schedules.

Response: The Company is unable to locate any memoranda that identifies or

describes the Company's decision to continue to use the Metscan devices for large customers that required daily meter reading. The decision was made based on the fact that the Company owned the technology, the technology was capable of providing the required information in the required intervals and the technology was needed to

serve a relatively small number of customers.

RESPONSE OF BAY STATE GAS COMPANY TO THE TWENTY FIRST SET OF INFORMATION REQUESTS FROM THE ATTORNEY GENERAL

D. T. E. 05-27

Date: July 10, 2005

Responsible: Stephen H. Bryant, President

AG-21-13 Refer to AG-3-32(b), p. 23. The Company states that an increasing

percentage of outside meters will improve PBR targets. Provide the

rationale behind this assertion.

Response: Outside meters do not pose significant access problems for manual meter

reading, compared to meters that are located inside buildings.

RESPONSE OF BAY STATE GAS COMPANY TO THE TWENTY FIRST SET OF INFORMATION REQUESTS FROM THE ATTORNEY GENERAL

D. T. E. 05-27

Date: July 10, 2005

Responsible: Stephen H. Bryant, President

AG-21-16

Refer to AG-3-32(b), p. 28. The Company states that in some circumstances the devices worked at first but then failed due to premature battery failure (due to excessive phone calls or water damage) and environmental damage. Regarding the premature battery failure, define excessive phone calls and explain how that causes battery failure. Regarding environmental damage, identify the causes of such damage and how it differs from water damage. Identify by year the number and percentage the instances of device failure due to premature battery failure and environmental damage.

Response:

Each time the device attempts to connect to the billing system, battery power is required. If the device could not make contact with the billing system due to break in the telephone connection, the device would "interpret" this situation as a line in use and would attempt to call again later. The device would periodically attempt to connect until the telephone line was repaired. This cycling of call attempts reduced the life of the battery, as compared to the battery in a device that successfully connected to the billing system on the first attempt each month.

Environmental damage comes about from exposing the device to all weather conditions. This exposure causes the moisture seal to fail. Environmental damage is the cause and water leakage is the effect.

The Company does not have statistics by year related to premature battery failure or environmental damage.

RESPONSE OF BAY STATE GAS COMPANY TO THE TWENTY FIRST SET OF INFORMATION REQUESTS FROM THE ATTORNEY GENERAL

D. T. E. 05-27

Date: July 10, 2005

Responsible: Stephen H. Bryant, President

AG-21-17 Refer to AG-3-32(b), p. 30. Define excessive phone problems and

identify the number of Metscan devices that the Company removed from

customer homes due to excessive phone problems.

Response: The Company is unclear as to this question. Page 30 of AG-3-32(b) does

not appear to focus on excessive phone problems.

RESPONSE OF BAY STATE GAS COMPANY TO THE TWENTY-SECOND SET OF INFORMATION REQUESTS FROM THE ATTORNEY GENERAL

D. T. E. 05-27

Date: July 10, 2005

Responsible: Stephen H. Bryant, President

AG-22-54 Regarding the call centers, please indicate:

- (a) how costs are allocated to the service territories (ME, NH, MA);
- (b) how the Company ensures that its employees in the call center receive the representative proportion of calls from each service territory (i.e. ME, NH, MA).

Response:

- (a) Bay State's Springfield building costs, where the Contact Center is located, are allocated among the Company's three state jurisdictions (i.e., ME, MA and NH) based on a building cost allocation study, which was most recently updated in the fall of 2004. This study, which is being supported by Mr. Skirtich, determined the square footage used by each employee, and allocated building costs based on the percentage of floor space used for functions common to all jurisdictions versus functions dedicated to supporting the Massachusetts operations. The Contact Center's labor costs are allocated using the Company's "3-Part formula," which spreads these labor costs across the same jurisdictions based on (1) gross utility plant less goodwill, (2) O&M net of total management costs, and (3) number of retail customers. See the Company's response AG-01-26 for a copy of the Bay State Northern Utilities Service Agreement that includes the "3 Part Formula."
- (b) Since incoming phone calls are distributed through the Company's Automatic Call Distributor ("ACD"), each Contact Center representative, who are trained to handle all three jurisdictions, has an equal chance of receiving calls from each jurisdiction.

RESPONSE OF BAY STATE GAS COMPANY TO THE EIGHTEENTH SET OF INFORMATION REQUESTS FROM THE D.T.E. D. T. E. 05-27

Date: July 9, 2005

Responsible: Danny G. Cote, General Manager

- DTE-18-24 Refer to the Company's response to Information Request AG-2-33. Please provide a similar set of analyses for Lawrence and for Springfield.
 - (A) Identify the source(s) of data used in the analyses;
 - (B) Describe the independent and dependent variables used; and
 - (C) Provide the summary statistical output for each regression analysis performed.

Response:

- (A) The source of the data shown in Attachment AG-2-33 is the Research and Special Programs Administration (RSPA) Form F7100.1-1, Annual Report for Gas Distribution Systems.
- (B) The independent variable, the calendar year, is shown on the x-axis. The dependent variable is shown on the y-axis. Depending upon the graph being reviewed, the dependent variable is either the leak rate per mile or number of corrosion main leaks repaired or eliminated during the year. The leak rate per mile was determined by summing the total number of main leaks (due to corrosion) repaired or eliminated each calendar year and then dividing this quantity by the sum of the miles of bare unprotected steel main plus coated unprotected steel main in the system at each calendar year end. The number of corrosion main leaks repaired or eliminated was obtained from the Company's Work Order Management System (WOMS) database. The regression line was added by selecting the "Add Trend Line" feature within Microsoft Excel. The summary of statistical output for the regression analyses is attached.
- (C) Please see Attachment DTE-18-24 for a set of analyses for Lawrence and Springfield similar to Information Request AG-2-33, excluding Attachment AG-2-33 page 8 (Cast Iron & Wrought Iron Mains with Bell Joint Leaks) and Attachment AG-2-33 page 10 (Cast Iron & Wrought Iron Mains with Outside Force Leaks). The Company will supplement the response with the additional data as soon as it is available. Included in Attachment DTE-18-24 is the summary of statistical output for the regression analyses performed.

RESPONSE OF BAY STATE GAS COMPANY TO THE SIXTEENTH SET OF INFORMATION REQUESTS FROM THE D.T.E. D. T. E. 05-27

Date: July 9, 2005

Responsible: Danny G. Cote, General Manager

DTE-16-22 Refer to Exh. BSG/DGC-11, at 1. Please provide any benefit/cost

analyses made prior to and as a basis for acquiring the Easy System intangible plant addition. Describe with supporting documentation the process of acquiring the system including any bidding performed.

Response: Please see Attachment DTE-12-22 for the benefit/cost analysis for the

EASy Industrial Billing Automation Upgrades. The Company is currently unable to locate the benefit/cost analysis for the EASy Industrial Billing Automation System. The Company will supplement the response with

additional data if it becomes available.

Energy Distribution

Prospectus for Proposed Information Technology Investment

EASy INDUSTRIAL BILLING AUTOMATION UPGRADES

Section 1 Background

Date Submitted/Amended	11/07/00
Name of Proposed IT Initiative	EASy Industrial Billing Automation Upgrades
Name of Related Business Initiative (if applicable)	
Purpose and Objectives (list all)	Enhance EASy application to change the billing of industrial customers from an manually intensive process to an automated billing process.
	Goal: 99% - 100% of industrial customers billed in 3-5 working days as opposed to 10 -17 days currently.
Project Sponsor & Title	Ron Uzubell - Director Billing
Project Manager(s) (could include co-managers from business area & IT)	Pat Gyure – Manager Industrial Billing Joyce Shroka or Janet Kuhn– Information Technology
Expected Useful Life of solution (once implemented)	
Required or Expected Completion Date	12/31/01
Definition of project success, as defined by key stakeholders (must be measurable)	All gas transmission customers are billed through EASy on-system.
Key Assumptions	

Section 2 Estimated Benefits

What are the known or projected benefits from implementing this initiative? Consider all known benefits, including:

- increased revenue (e.g., customer acquisition or retention)
- expected cost savings (e.g., automating a manual work flow)
- increased staff productivity
- cost savings from retiring existing applications
- · satisfying legal or regulatory requirements
- risk or exposure if initiative is not implemented

Benefit	Expected \$ value or quantity of benefit .(by time period)	Organization to which benefit will accrue	Time period for benefit to begin accruing
Improved revenue flow.	\$5.3 M monthly gas billings of which 46% are billed late. 46% of \$5.3M is \$2.4M * 12 months = \$28.8 M annual billings would be received 7 days earlier. 7/365= .02 * \$28.8M = \$576K * 10.12 interest rate = \$58,300 annual interest savings due to not having to borrow money, based on the improved revenue flow.	Industrial Billing	1 month
Customer satisfaction in receiving timely bills.		Customer Service	Immediate

Will these benefits be realized solely from implementing this new IT initiative, or will additional actions be required? (For example, policy changes may be required to support a streamlined workflow, or staff may need to be re-assigned to another area to yield expected labor cost savings.) If additional actions are required to realize a benefit, identify them below and indicate who will be responsible:

Benefit	Required Actions/ Responsible Manager	Underlying Assumptions
Increased productivity of industrial billing clerks.	Ron Uzubell	Industrial Billing clerks will be given electric projects in place of manual time spent on industrial gas billing.

Section 3 Estimated Levels of Investment

What are the known or projected levels of investment required to implement this technology initiative? Consider all required investments, including:

- hardware, software, networks, and associated license fees
- other external provider fees
- · internal labor costs for IT staff to develop the solution
- internal labor costs for IT staff to maintain the solution, including disaster recovery (during each year of its useful life)
- · internal labor costs of business user participation
- user training and other business transition costs, including business continuity planning

COST CATEGORY	COST AMOUNT
One Time - IT Costs	\$100,000
Development (including interfaces)	\$100,000
Implementation	Included above
Hardware Purchase	
Software Purchase	
Network/Connectivity Costs	Included above
Disaster Recovery	
Testing	Included above
Training	Included above
Business Process Redesign	
Business Continuity Planning	
Other (Identify)	
Total One-time Investment	\$100,000
Annual Operation, Maintenance, Support	(No fees, home-grown application.)
License Fees	
Labor - Operations	
Labor - Maintenance	
Disaster Recovery	

COST CATEGORY	COST AMOUNT	Page 4 of 12
Other (Identify)		
Total Annual Costs	-0-	1.5

Section 4 Factors Affecting Return on Investment

Review each of the potential risk areas identified below and identify what actions must be taken to protect the return on investment. (A risk is defined as anything that could prevent the project from meeting its targets and which could reduce the eventual return on investment.)

Risk Area	Key Factors	Likely Risks and Impact Mitigating Actions	Responsible Manager
Clarity of project scope and objectives	 Do all stakeholders understand and agree on the scope and objectives of this solution, as documented above? 	Yes	R. Uzubell
	 What is the scope of this project— single company, multi- company, or enterprise-wide? If the solution applies to multiple organizations, who are they and are the stakeholders from each group involved? 	Single company: NIPSCO	R. Uzubell

Risk Area	Key Factors	Likely Risks and Impact Mitigating Actions	Res Rage 5 Manager
Accuracy and completeness of business requirements	 Who possesses the business knowledge to accurately and completely define the business requirements (function, data, performance) for this solution? 		·R. Uzubell
	 How will these business experts be represented on the project team? 	Member of project team	R. Uzubell
	 If some business requirements are not currently understood, how will this gap be addressed? 	Agreement between P. Jarrard and R. Uzubell	R. Uzubell
Project planning	 Does a high-level management plan exist for this project, and has this plan been reviewed with the project team? 	Yes- Services Requests had been submitted but were put on hold due to New Products & Services requiring programming resources.	R. Uzubell
	 Do the time and resource estimates included in the plan seem realistic, given the complexity and scope of the project? 	Time estimates need to be reviewed and updated.	R. Uzubell J. Shroka/ J. Kuhn
	 Does the project plan include time and budget contingencies to accommodate unforeseen events (e.g., a two-week vendor delay)? 	Project plan needs to be reviewed and updated.	R. Uzubell J. Shroka/ J. Kuhn
	 Are key project milestone and delivery dates synchronized with related business initiatives? 	Not necessary	

Risk Area	Key Factors	Likely Risks and Impact	D.T.E. 05 ment DTE-16 ResPage 6 o Manager
		Mitigating Actions	
Project staffing	 What are the staffing requirements (both business and IT) for the project team? Have all project team positions been filled? 	1 PT – Business Analyst 1 PT – IT project manager 2 to 3 – IT programmers No	R. Uzubell J. Shroka/ J. Kuhn R. Uzubell J. Shroka/ J. Kuhn
	Do all key stakeholders agree on the specific staffing commitments and durations for the project team? What factors might impact staff availability?	Yes – IT staffing may be limited due to other high priority enhancements to EASy. Would require agreement between Merchant Co and Energy Distribution on EASy enhancement priorities.	R. Uzubell
Technology expertise	What is the technology architecture (hardware, software, network) proposed for this solution? Does the project team have experience developing solutions in this technology architecture? If not, how will this expertise be acquired?	C++ and PowerBuilder programs with Oracle database. Yes	J. Shroka/ J. Kuhn J. Shroka/ J. Kuhn
	 How will the project team validate the reliability and performance of the proposed technology architecture, prior to implementation? 	User testing	R. Uzubell

Bay State Gas Company D.T.E. 05-27

Attach	ment DTE-1	6-22
Impact	Res Ragele7	of 12

Risk Area	Key Factors	Likely Risks and Impact	ResRagele7
	<u></u>	Mitigating Actions	Transage.
Impact on Existing Computing Environment	Will implementing this technology solution affect the performance of the existing hardware platform or network? What are the anticipated numbers of users, transactions, etc.? If so, what is the	No	J. Shroka/ J. Kuhn
	expected change in performance? Is this new performance level still acceptable to supported business users?		
0	 If not, what additional investments must be made to support the existing computing environment? 		
Quality Assurance	 What processes will be employed to validate the quality of both interim and final project team outputs (e.g., System design, Software program)? 	Processes are now in place – Revenue & Statistics, setup letter and internal system auditing	R. Uzubell
Vendor Management	 Does the vendor's offering have a wide installed base in the marketplace? What is the perceived quality of this package? 	N/A	
	 Has a financial assessment of this vendor been completed and if so, what are the results of the assessment? 		
	 Have all vendor claims of package capability been verified by the project team? If not, how and when will this occur? 		

			nment DTE-
Risk Area	Key Factors	Likely Risks and Impact Mitigating Actions	Resp Page 8 Manager
User and IT Training	 What new skills does the solution require for the business users and IT staff? How will these skills be acquired prior to implementation? 	None	
Business Process and Organizational Change	Will changes to business operations (work flow, job roles, policy, performance measures) be implemented as part of this initiative? Are they clearly understood? What are the changes?	None	
65	 Does acceptance of this technology solution depend on successful implementation of these business operations changes? Who is responsible for 		35 53 8
	successfully managing this change? Has a change management and communications plan been prepared (if appropriate)?		
Other Risks	 What other risks might affect the success of this project? 	Ability to obtain programmers with appropriate business and technical knowledge.	

Section 5 Estimated Return on Investment

What is the overall value of this investment? Consider all known benefits, costs and risks as presented in the previous sections.

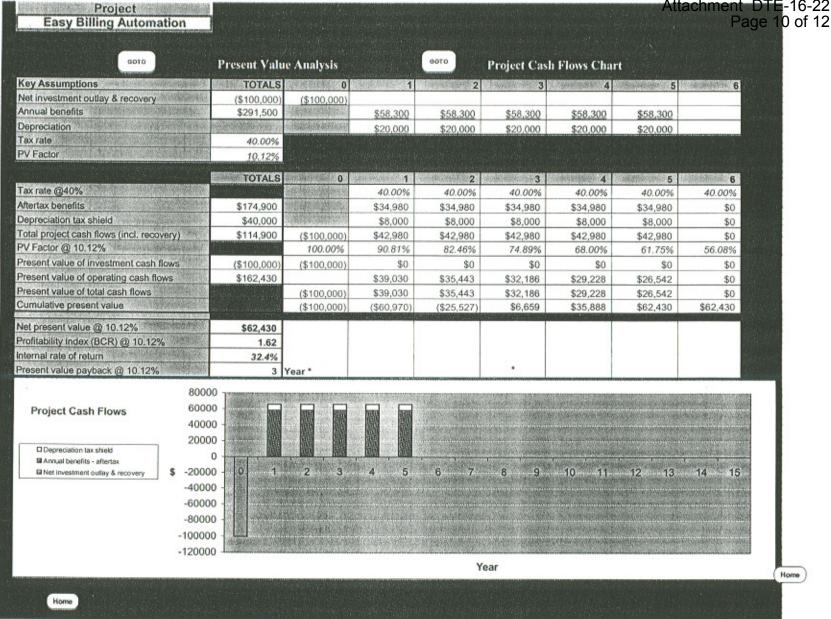
IT investments need to be evaluated using a Risk Adjusted Discount Rate (RADR). As with growth investments, RADR is a convenient way of recognizing that different kinds of projects

Bay State Gas Company
D.T.E. 05-27
have different risks and therefore require different returns. See the IT Risk Adjusted Displaye 9 of 12
Rates attachment.

Measure	Value	
Net Present Value @ 10.12%	\$62,430	

Capital Budgeting Worksheet

Bay State Gas Company D.T.E. 05-27 Attachment DTE-16-22



IT Risk Adjusted Discount Rate

Bay State Gas Company D.T.E. 05-27

Print Worksheet	Project				WACC	Risk Adj.	Attachment DTE-16-22 Discount Page 11 of 12
Send Email	Easy Billing Automation	Risk	Rating		8.62%	1.50%	10.12%
Energy Distribution		High	3				
		Moderate					
		Low	1				
(1.) Technology		Rating	Weight	Score			
	Type of Technology	1	8%	0.08			
	Application	1	8%	0.08			
	Vendor / Relationship	1	9%	0.09			
			25%	0.25			
(2.) Business /							
Operational Impact	Business Dances / Dadacias	Rating	Weight	Score			
	Business Process / Redesign Integration	3 2	8%	0.24	_		
	Implementation Process	1	8% 9%	0.16	_		
	Implementation Process	578 (1980)	- Contractor Contracto	CO. COLUMN AND DESCRIPTION OF THE PARTY OF T	-		
			25%	0.49			
and the property of the second second							
							allon House to consider the

IT Risk Adjusted Discount Rate

Bay State Gas Company D.T.E. 05-27

Print Worksheet	Project				WACC	Risk Adj. A	ttachment DIE-1
Send Email	Easy Billing Automation	Risk I	Rating		8.62%	1.50%	ttachment DTE-1 Discount Page 12 of 10.12%
nergy Distribution		High	3	· Aller St.	I -		
		Moderate	2				
		Low	1				
3.) Benefits / Purpose		Rating	Weight	Score			
	Revenue Generation /						
	Enhancement	3	8%	0.24	_		
	Cost Savings	3	8%	0.24	Market 1		
	Productivity	3	9%	0.27			
			25%	0.75			
) Costs		Rating	Weight	Score			
) Costs	Software	Rating 2	Weight 3%	Score 0.06			
Costs	Software Hardware						
Costs		2	3%	0.06			
Costs	Hardware	2	3% 3%	0.06			
) Costs	Hardware Contractual	3	3% 3% 3%	0.06 0.09 0.03			
) Costs	Hardware Contractual External Resources	3	3% 3% 3% 3%	0.06 0.09 0.03 0.09			
) Costs	Hardware Contractual External Resources Internal Resources	2 3 1 3 1	3% 3% 3% 3% 5%	0.06 0.09 0.03 0.09 0.05			
) Costs	Hardware Contractual External Resources Internal Resources Ongoing Support	2 3 1 3 1	3% 3% 3% 3% 5% 3%	0.06 0.09 0.03 0.09 0.05 0.03		Score:	Risk Adj;
) Costs	Hardware Contractual External Resources Internal Resources Ongoing Support	2 3 1 3 1	3% 3% 3% 3% 5% 3% 5%	0.06 0.09 0.03 0.09 0.05 0.03 0.05		Score: Less Than 1.5	Risk Adj;
) Costs	Hardware Contractual External Resources Internal Resources Ongoing Support One Time Expense	2 3 1 3 1	3% 3% 3% 3% 5% 3% 5%	0.06 0.09 0.03 0.09 0.05 0.03 0.05		Less Than 1.5 Greater Than 1.5 and	The second secon
) Costs	Hardware Contractual External Resources Internal Resources Ongoing Support One Time Expense	2 3 1 3 1 1	3% 3% 3% 3% 5% 3% 5%	0.06 0.09 0.03 0.09 0.05 0.03 0.05		Less Than 1.5	0%